Project Description	Project Purpose and Explanation	Request Amount (in THOUSANDS)	Suggested Recipient	Suggested Location
Advanced Manufacturing for Submarine Bow Domes and Rubber Boots	To develop out-of-autoclave material systems and processing techniques to build sonar bow domes and boots that will provide manufacturing flexibility, maintain reliability and quality requirements, and will allow fabrication of domes and boots for larger submarines.	1,250	U.S. Navy for Research and Development for New Design SSN	As awarded by the suggested recipient
Advanced Materials Design and Processing Development	To pioneer advanced materials by design for the accelerated development of advanced lightweight vehicle protection materials for the U.S. Army with the goal of enhancing performance and survivability.	2,477	University of Central Florida	Orlando, FL
Advanced Ultrasound for Combat Casualty Care	To design and fabricate a self-calibrating conformal array, the electronics necessary to calibrate and exercise it, and the software required to form 3-D and 4-D images, with minimal medic training in a battlefield setting.	1,000	U.S. Army for Research and Development for Medical Advanced Technology	As awarded by the suggested recipient
AN/AAR-47 Missile Warning System: Computer Processor Upgrade	To develop the technology to enable the retrofit of already deployed AAR-47 units to include hostile fire indicator capabilities through an upgrade to the computer processor, thereby reducing aircraft down-time and per unit upgrade costs, while accelerating delivery to the war fighter.	5,000	U.S. Navy for Procurement of Aircraft Modification Equipment	As awarded by the suggested recipient

Assistive Technologies for Injured Service Members	To develop, test and evaluate novel non-invasive assistive technologies to enhance the sensory, mobility, and cognitive abilities of injured service members by augmenting their remaining capabilities and supplanting losses.	2,400	Florida Institute for Human and Machine Cognition (IHMC)	Pensacola, FL
Center for Ophthalmic Innovation (ONOVA), Bascom Palmer Eye Institute	To assemble required multidisciplinary teams to accomplish the goal of creating effective treatments and cures for blinding eye trauma and disease in the most efficient manner for rapid implementation.	1,150	University of Miami	Miami, FL
Center of Excellence for Medical Regenerative Therapies	To develop new tissues, including skin, bone, muscle, nerves and teeth that will advance military and civilian health care.	1,250	Nova Southeastern University	Ft. Lauderdale, FL
Characterization and Exploitation of Magnetic and Electric Fields in the Coastal Ocean Environment	To develop technologies to cancel or reduce the magnetic signatures of ships and submarines in order to protect American sailors and resources from magnetically-triggered buried mines and other submerged threats.	1,250	Florida Atlantic University (SeaTech Campus)	Dania Beach, FL
Crop Biofuel Demonstration Program	To develop a suite of sustainable biofuels and carbon management technologies to provide the Air Force with a domestic source of clean fuels at a competitive cost to fossil fuels for its aircraft and vehicles.	3,200	University of South Florida Polytechnic	Lakeland, FL

Deployment and Distribution Enterprise Technology: North Florida Strategic Seaport Access and Strategic Rail Corridor	To support a military use assessment of a North Florida rail freight corridor from the Port of Jacksonville as a bypass route for military rapid deployment and retrograde-reset avoiding downtown Jacksonville using existing right of way to Waycross, GA, and the Strategic Rail Corridor Network.	1,000	Strategic Mobility 21	Jacksonville Field Office Cecil Commerce
Engagement Skills and Warrior Skills Trainer	To provide a virtual training package involving new training scenarios, weapons and IED training to additional Air National Guard Combat Readiness Training Centers in support of depoying airmen.	1,700	Florida Air National Guard	As awarded by the suggested recipient
Enhanced Situational Awareness Technology Demonstrator	To develop technology that will provide increased situational awareness, enhanced safety and improved survivability for the warfighter using a cost-effective "drop-in" upgrade that will speed delivery and deployment of the capability.	2,500	U.S. Army for Research and Development for Night Vision Advanced Technology	As awarded by the suggested recipient
Enhance STRIKE Functionality and Integrate Actionable Intelligence into National Intelligence Systems	To enhance STRIKE functionality in support of specific tactical and mission requirements. Also to integrate the actionable intelligence output from STRIKE into national-level intelligence/reconnaissance systems and architectures.	1,750	U.S. Navy for Research and Development for Marine Corps Communications Systems	As awarded by the suggested recipient

Fighting Combat-related Fatigue Syndrome	To examine the effects of delivering energy to the diabetic heart and applying them to delivering energy to the warfighters' entire muscular system to keep a soldiers body from “de-training” in situations where exercise is not available, as well as allowing a wounded soldier to not lose their muscle mass while recovering from injury.	1,100	Sanford/Burnham Medical Research Institute	Orlando
Florida Counterdrug Program	To continue successful execution of the President and Governor's counter-narcotics initiatives, operationally posture the program to meet evolving threats, and ensure the re-employment of Florida National Guard Combat Veterans.	2,900	Florida National Guard	St. Augustine, FL
Halvorsen 25k Loader	To allow the Air Force to procure Halvorsen Loader Units, which are key pieces of airlift logistics equipment capable of rapidly deploying to austere operating locations.	4,850	U.S. Air Force for Procurement of Vehicular Equipment	As awarded by the suggested recipient
HapMed Combat Medic Trainer	To develop a medical simulation training center that will contribute to improvements in the treatment of hemorrhage control, airway control, and the treatment of tension pneumothorax, counteracting the primary causes of death on the battlefield.	1,349	U.S. Army for Research and Development for Next Generation Training and Simulation Systems	As awarded by the suggested recipient
High Power Laser Technologies Initiative	To develop a high-power laser technology program to provide the Navy, Department of Defense, and the Nation with focused education and research programs in dual-use laser technologies.	2,325	University of Central Florida	Orlando, FL

Hypothermia and Regenerative Treatments for Neurotrauma	To continue development of moderate hypothermia as a strategy to limit the detrimental consequences of acute brain and spinal cord injury in patients, a strategy that could easily be adapted for the battlefield.	8,100	The Miami Project to Cure Paralysis	Miami, FL
Integrated Cryo-cooled High Power Density Systems	To approach the Defense Department goal of achieving high power densities through systems integration, management of heat generation and removal in the electrical system and minimize energy consumption.	2,000	Florida State University	Tallahassee, FL
Integration of Electro-kinetic Weapons into the Next-Generation Navy Ships	To develop the next-generation integrated power system for future war ships with an all-electric platform of propulsion and weapon loads and electric power systems with rapid reconfigurable distribution systems.	2,750	Florida State University	Tallahassee, FL
Jet Engine Noise: Understanding and Reduction	To develop a comprehensive program to address the problem of Jet Engine aircraft noise for the Navy, through experts in the area of Active Flow and Noise Control.	1,900	Florida State University	Tallahassee, FL
Joint Theater Air-Ground Simulation System/ASOC Special Operations Forces Command and Control Simulation System	To develop the technology for high fidelity simulators and sumulations that will provide a training environment involving a large number of disparate elements associated with Theater Air Ground Systems.	2,200	U.S. Air Force for Research and Development for Human Effectiveness Applied Research	As awarded by the suggested recipient

KC-135 Real-Time Information in the Cockpit	To develop a netcentric real-time information in the cockpit capability to provide enhanced situational awareness of the battlespace for the KC-135 missions.	3,500	U.S. Air Force for Research and Development for KC-135's	As awarded by the suggested recipient
Liquid Desiccant-Based Atmospheric Water Generation Without Reverse Osmosis	To reduce the Army's logistical footprint using an atmospheric water generation system.	2,500	U.S. Army for Research and Development for Combat Vehicle and Automative Advanced Technology	As awarded by the suggested recipient
Nano-medicine for Radiation Protection of U.S. Armed Forces	To develop new therapeutic approaches to diagnose, prevent, treat and eradicate life threatening diseases and conditions caused by radiation, as well as resolve pain and improve medical techniques.	1,250	Orlando Health -- M.D. Anderson Cancer Center	Orlando, FL
Nanotubes Optimized for Lightweight Exceptional Strength Composite Materials	To develop the design, characterization and rapid prototyping capabilities in the field of nano-composite research, leading to vital defense applications.	2,250	Florida State University	Tallahassee, FL
National Functional Genomics Center	To support applied research that provides for healthy, medically protected soldiers and translates into reduced financial costs and morbidity associated with cancer treatment in the military, resulting in reduced disruption to the active duty soldier.	5,000	Moffitt Cancer Center and Research Institute	Tampa, FL

Research and Development and Trial Install of Advanced Infrared Countermeasures on MC-130 Talon II Aircraft	To develop the technology to upgrade the existing infrared protection systems on the MC-130 Talon II aircraft operating in forward areas where man-portable infrared guided missiles are known to be present.	4,000	U.S. Air Force Research and Development for Large Aircraft Infrared Counter Measures	As awarded by the suggested recipient
Surgical Skills and Simulation Training Program	To establish a surgical skills and simulation training program to address the current shortage of general and minimally-invasive surgical training opportunities for military and civilian physicians in Florida and surrounding states.	2,250	Cleveland Clinic Florida	Westin
Tactical Smartphone for Secure Training and Communication	To assist the Department of Defense in the development of a secure communications platform based on the Google-sponsored Android mobile operating system.	2,500	University of Central Florida	Orlando, FL
Underwater Imaging and Communications Using Lasers	To develop a laser-based communications technology that will allow unprecedented advances in U.S. Navy underwater communications.	1,000	Florida Atlantic University (Harbor Branch Oceanographic Institution)	Fort Pierce, FL
30-kW Auxiliary Power Unit for Armored Combat Vehicles	To develop a compact, lightweight (400-pound), variable output, 30 kW auxiliary power unit that will provide for electrical power generation in armored combat vehicles.	2,200	U.S. Army for Research and Development for Combat Vehicle and Automotive Advanced Technology	As awarded by the suggested recipient